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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/593,639 | 12/29/2006 | Lars Nilsson | 1510-1121 | 4917 |
| <div>466 7590 12/15/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314</div> | | | <div>EXAMINER CROUCH, DEBORAH</div> | |
| | | | <div>ART UNIT 1632</div> | <div>PAPER NUMBER</div> |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/593,639

Applicant(s)

NILSSON ET AL.

Examiner

Deborah Crouch

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, 11-17, 22 and 23 drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an presenilin mutation associated with Alzheimer's disease, wherein the endogenous APP is non-expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group II, claim(s) 1-4, 6, 11-16, 18, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an apoE mutation, apoJ mutation or ACT mutation associated with Alzheimer's disease, wherein the endogenous APP is non-expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group III, claim(s) 1-4, 7-9, 11-16, 19, 20, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and an another APP mutation associated with Alzheimer's disease, wherein the endogenous APP is non-expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group IV, claim(s) 1-5, 10-17, 22 and 23 drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an presenilin mutation associated with Alzheimer's disease, wherein the endogenous APP is non-expressive, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group V, claim(s) 1-4, 6, 10-16, 18, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an apoE mutation, apoJ mutation or ACT mutation associated with Alzheimer's disease, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, wherein the

endogenous APP is non-expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group VI, claim(s) 1-4, 7-9, 10-16, 19, 20, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and an another APP mutation associated with Alzheimer's disease, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, wherein the endogenous APP is non-expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group VII, claim(s) 1-5, 11-15, 17, 22 and 23 drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an presenilin mutation associated with Alzheimer's disease, wherein the endogenous APP is expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group VIII, claim(s) 1-4, 6, 11-15, 18, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an apoE mutation, apoJ mutation or ACT mutation associated with Alzheimer's disease, wherein the endogenous APP is expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group IX, claim(s) 1-4, 7-9, 11-15, 19, 20, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and an another APP mutation associated with Alzheimer's disease, wherein the endogenous APP is expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group X, claim(s) 1-5, 10-15, 17, 22 and 23 drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an presenilin mutation associated with Alzheimer's disease, wherein the endogenous APP is expressive, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group Xi, claim(s) 1-4, 6, 10-15, 18, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and a transgene comprising a DNA sequence encoding an apoE mutation, apoJ mutation or ACT mutation associated with Alzheimer's disease, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, wherein the

endogenous APP is expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

Group XII, claim(s) 1-4, 7-9, 10-15, 19, 20, 22 and 23, drawn to a transgenic nonhuman animal expressing at least one transgene comprising a DNA sequence encoding an APP-Arctic mutation and an another APP mutation associated with Alzheimer's disease, and further comprising a disruption in a neprilysin or insulin-degrading enzyme gene, wherein the endogenous APP is expressive, a method of making the nonhuman animal and a method of screening using the nonhuman animal.

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: At the time of filing the art taught double transgenic mice expressing both APP FAD mutations 717 and 670/671 (Chishii, page 21564). Also the art taught expression of a DNA sequence encoding the APP-Arctic mutation in transfected resulted in amyloid fibril production (Nilsberth, page 890).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

/Deborah Crouch/
Primary Examiner, Art Unit 1632

December 13, 2008